

September 13, 2004

Mr. W. E. Cummins, Director
AP600 & AP1000 Projects
Westinghouse Electric Company
P.O. Box 355
Pittsburgh, PA 15230-0355

SUBJECT: FINAL SAFETY EVALUATION REPORT FOR AP1000 DESIGN

Dear Mr. Cummins:

The enclosed Final Safety Evaluation Report (FSER) summarizes the staff's safety review of the AP1000 design against the requirements of Subpart B of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 52 and delineates the scope of the technical details considered in our evaluation of the AP1000 design. In addition, this FSER documents the resolution of the open and confirmatory items identified in the Draft Safety Evaluation Report (DSER), which was issued on June 16, 2003. In Chapter 24 of the report, the staff states that, on the basis of its evaluation and independent analyses, the staff concludes that Westinghouse Electric Company's application for design certification meets the requirements of 10 CFR 52.47 that are applicable and technically relevant to the AP1000 standard plant design.

This FSER is being issued in accordance with the schedule delineated in James E. Lyons letters, "Update of AP1000 Design Certification Review Schedule," dated December 2, 2003, and "Reconfirmation of AP1000 Design Certification Review Schedule," dated March 24, 2004. In the December 2, 2003, letter, Mr. Lyons also stated that it may be possible to complete the design certification rulemaking earlier than the scheduled date of December 2005. The completion of the rulemaking is also dependent upon the extent of any post FSER design changes requiring NRC staff review, any additional regulatory requirements codified prior to the completion of design certification rulemaking, and potential impacts of other high priority agency review activities.

If you have any questions regarding this matter, you can contact the lead project manager, John Segala at (301) 415-1858.

Sincerely,

/RA/

William D. Beckner, Program Director
New, Research and Test Reactors Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Docket No. 52-006

Enclosure: as stated

cc: See next page

Mr. W. E. Cummins, Director
AP600 & AP1000 Projects
Westinghouse Electric Company
P.O. Box 355
Pittsburgh, PA 15230-0355

September 13, 2004

SUBJECT: FINAL SAFETY EVALUATION REPORT FOR AP1000 DESIGN

Dear Mr. Cummins:

The enclosed Final Safety Evaluation Report (FSER) summarizes the staff's safety review of the AP1000 design against the requirements of Subpart B of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 52 and delineates the scope of the technical details considered in our evaluation of the AP1000 design. In addition, this FSER documents the resolution of the open and confirmatory items identified in the Draft Safety Evaluation Report (DSER), which was issued on June 16, 2003. In Chapter 24 of the report, the staff states that, on the basis of its evaluation and independent analyses, the staff concludes that Westinghouse Electric Company's application for design certification meets the requirements of 10 CFR 52.47 that are applicable and technically relevant to the AP1000 standard plant design.

This FSER is being issued in accordance with the schedule delineated in James E. Lyons letters, "Update of AP1000 Design Certification Review Schedule," dated December 2, 2003, and "Reconfirmation of AP1000 Design Certification Review Schedule," dated March 24, 2004. In the December 2, 2003, letter, Mr. Lyons also stated that it may be possible to complete the design certification rulemaking earlier than the scheduled date of December 2005. The completion of the rulemaking is also dependent upon the extent of any post FSER design changes requiring NRC staff review, any additional regulatory requirements codified prior to the completion of design certification rulemaking, and potential impacts of other high priority agency review activities.

If you have any questions regarding this matter, you can contact the lead project manager, John Segala at (301) 415-1858.

Sincerely,

/RA/

William D. Beckner, Program Director
New, Research and Test Reactors Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Docket No. 52-006

Enclosure: as stated

cc: See next page

Distribution:

RNRP R/F	WBeckner	DMatthews	FGillespie
JSegala	JColaccino	SBloom	LQuinones

ADAMS ACCESSION NUMBER:ML042400020

OFFICE	PM:RNRP	SC:RNRP	PD:RNRP
NAME	SBloom	LDudes	WBeckner
DATE	8/27/2004	8/27/2004	8/30/2004

OFFICIAL RECORD COPY

AP 1000

cc:

Mr. James A. Gresham, Manager
Regulatory Compliance and Plant Licensing
Westinghouse Electric Company
P.O. Box 355
Pittsburgh, PA 15230

Ms. Lynn Connor
Doc-Search Associates
2211 SW 1ST Ave - #1502
Portland, OR 97201

Mr. Barton Z. Cowan, Esq.
Eckert Seamans Cherin & Mellott, LLC
600 Grant Street 44th Floor
Pittsburgh, PA 15219

Mr. Charles Brinkman, Director
Washington Operations
Westinghouse Electric Company
12300 Twinbrook Parkway, Suite 330
Rockville, MD 20852

Mr. Adrian Heymer
Nuclear Energy Institute
1776 I Street NW
Suite 400
Washington, DC 20006

Mr. Thomas P. Miller
U.S. Department of Energy
Headquarters - Germantown
19901 Germantown Road
Germantown, MD 20874-1290

Mr. David Lochbaum
Nuclear Safety Engineer
Union of Concerned Scientists
1707 H Street NW, Suite 600
Washington, DC 20006-3919

Mr. Paul Gunter
Nuclear Information & Resource Service
1424 16th Street, NW., Suite 404
Washington, DC 20036

Mr. Tom Clements
6703 Guide Avenue
Takoma Park, MD 20912

Mr. James Riccio
Greenpeace
702 H Street, NW, Suite 300
Washington, DC 20001

Mr. James F. Mallay, Director
Regulatory Affairs
FRAMATOME, ANP
3315 Old Forest Road
Lynchburg, VA 24501

Mr. Ed Wallace, General Manager
Projects
PBMR Pty LTD
PO Box 9396
Centurion 0046
Republic of South Africa

Mr. Glenn Archinoff
Licensing Manager
AECL Technologies Inc.
481 North Frederick Avenue
Suite 405
Gaithersburg, MD 20877

Mr. Gary Wright, Manager
Office of Nuclear Facility Safety
Illinois Department of Nuclear Safety
1035 Outer Park Drive
Springfield, IL 62704

Mr. Paul Leventhal
Nuclear Control Institute
1000 Connecticut Avenue, NW
Suite 410
Washington, DC 20036

Mr. Jack W. Roe
SCIENTECH, INC.
910 Clopper Road
Gaithersburg, MD 20878

Ms. Patricia Campbell
Winston & Strawn
1400 L Street, NW
Washington, DC 20005

Mr. Brendan Hoffman
Research Associate on Nuclear Energy
Public Citizens Critical Mass Energy
and Environmental Program
215 Pennsylvania Avenue, SE
Washington, DC 20003

Mr. Ronald P. Vijuk
Manager of Passive Plant Engineering
AP1000 Project
Westinghouse Electric Company
P. O. Box 355

Pittsburgh, PA 15230-0355

Mr. Russell Bell
Nuclear Energy Institute
Suite 400
1776 I Street, NW
Washington, DC 20006-3708